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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/696,914
Filing Date: October 29, 2003
Appellant(s): EZELL ET AL.

David A. Fox
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief received 06/16/2008 appealing from the Office action mailed 08/22/2007.

(1) **Real Party of Interest**

A statement identifying the real party of interest is contained in the brief.

(2) **Related Appeals and Interferences**

The Examiner is not aware of any related appeals, interferences, or judicial proceedings which directly affect or will be affected by or have a bearing on the Board's decision in the pending appeal.

(3) **Status of Claims**

The statement of the status of claims contained in the brief is correct.

(4) **Status of Amendments After Final**

There are no unentered amendments.

(5) **Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

(6) **Grounds of Rejection to be Reviewed on Appeal**

The Appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) **Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) **Evidence Relied Upon**

<u>Reference Number</u>	<u>First Named Inventor</u>	<u>Publication Date</u>	<u>Earliest Priority Date</u>
US 5,974,563	Beeler, Jr.	10-26-1999	10-16-1995
US 5,999,937	Ellard	12-7-1999	06-06-1997

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 6-10, and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent Number 5,974,563 issued to Donald E. Beeler, Jr. (hereinafter “Beeler”).

Claim 1:

Beeler a method for synchronizing data in first and second computer servers (*Beeler: column 15, lines 46-48 and Fig. 26*), the first computer server including a first plurality of data sets each having a first identifier and a first set of attributes (*Beeler: Fig. 26, 260 and column 5, lines 44-48 and column 9, lines 33-36; Note that the entire contents of a first server's hard drive can be synchronized (mirrored) with a second server's hard drive. The content of a computer's hard drive contains a plurality of files. Furthermore, stored files contain at least one identifier (file name) and a plurality of attributes (size, date created, date modified, etc.). So it is clear that each server has data sets including at least a first identifier and some form of first attributes.*), and the second computer server including a second plurality of data sets each having a second identifier and a second set of attributes (*Beeler: Fig. 26, 262 and column 5, lines 44-48 and column 9, lines 33-36; Note that the Source Server is the 'first server' and the Target Server is the 'second server'.*), the method comprising:

modifying an attribute of one of the first plurality of data sets (*Beeler: column 12, lines 57-65*) and setting a checksum associated with one of the first plurality of data sets to a predetermined value (*Beeler: column 15, lines 53-56 and Fig. 33, 333*);

accessing one of the first plurality of data sets having a checksum set to the predetermined value and formatting at least one attribute associated with the one of the first plurality of data sets to predetermined format type (*Beeler: column 5, lines 8-13 and column 11, lines 5-8*);

transmitting a second identifier (*Beeler: Fig. 26, 263; The second identifier is FAST.DAT (263).*) and a second checksum value (*Beeler: Fig. 26, 265*) both associated with one of the second plurality of data sets to the first computer server (*Beeler: column 15, lines 46-48 and column 15, line 50 – column 16, line 7; Note specifically column 15, lines 56-58. The information (identifier and checksum) related to a data set that is to be synchronized is requested from the second server by the first server. The first server receives this information. It is clear that the second server transmitted this information. Since the information was stored in the second server, the identifier and checksum involved must be the second identifier and second checksum.*);

accessing one of the first plurality of data sets having a first identifier (*Beeler: Fig. 26, 261; The first identifier is FAST.DAT (261).*) corresponding to the transmitted second identifier to determine a first checksum value (*Beeler: Fig. 26, 264*) associated with the accessed data set (*Beeler: column 15, lines 46-48 and column 15, line 50 – column 16, line 7*); and,

when the first checksum value is not equal to the transmitted second checksum value (*Beeler: column 15, lines 58-61 and column 15, line 67 – column 16, line 7; Note that transmitting and replacing only takes place if the two checksum values are unequal (i.e., different).*), transmitting the one of the first plurality of data sets from the first computer server to the second computer server to replace a

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second set of attributes of the one of the second plurality of data sets with the first set of attributes of the one of the first plurality of data sets (*Beeler: column 15, lines 58-61 and column 15, line 67 – column 16, line 7*).

Claim 2:

Beeler discloses all the elements of claim 1, as noted above, and Beeler further discloses wherein the one of the first plurality of data sets includes the first set of attributes associated with one of a physical network element, a software event, and a logical operator (*Beeler: column 5, lines 44-48; Surely a file stored on a server is a data set, having attributes, associated with a physical network element. The file (data set) and its attributes are associated with the server (physical network element) because the file is stored on the server.*).

Claim 3:

Beeler discloses all the elements of claim 1, as noted above, and Beeler further discloses wherein the first checksum value is calculated by the first computer server using the first set of attributes associated with the one of the first plurality of data sets (*Beeler: column 19, lines 4-7; Clearly the size of a data set is an 'attribute'. Note specifically that at least the size attribute is used in calculating the checksum.*).

Claim 4:

Beeler discloses all the elements of claim 1, as noted above, and Beeler further comprising transmitting the first checksum value to the second computer server to replace the second checksum value in the second computer server with the first checksum value (*Beeler: column 15, line 67 – column 16, line 7; When the file is overwritten in the second (target) server, the first checksum*

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value (from source) replaces the second checksum (stored in target) because now both the target version and the source version are both the same. If the files are the same, their checksums are equal.).

Claim 6:

Beeler discloses all the elements of claim 1, as noted above, and Beeler further discloses wherein the first plurality of data sets includes at least one data set that does not correspond to any of the second plurality of data sets (*Beeler: column 19, lines 7-12*).

Claim 7:

Claim 7 is rejected under the same reasons set forth in the rejection of claim 1.

Claim 8:

Claim 8 is rejected under the same reasons set forth in the rejection of claim 2.

Claim 9:

Claim 9 is rejected under the same reasons set forth in the rejection of claim 3.

Claim 10:

Claim 10 is rejected under the same reasons set forth in the rejection of claim 4.

Claim 12:

Claim 12 is rejected under the same reasons set forth in the rejection of claim 6.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beeler and further in view of U.S. Patent Number 5,999,937 issued to Scott Ellard (hereinafter "Ellard").

Claim 5:

Beeler discloses all the elements of claim 1, as noted above, but Beeler does not explicitly disclose wherein the one of the first plurality of data sets is formatted differently than the one of the second plurality of data sets.

However, Ellard discloses wherein the one of the first plurality of data sets is formatted differently than the one of the second plurality of data sets (*Ellard: column 3, lines 37-50 and Fig. 1*).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Beeler with the teachings of Ellard noted above for the purpose of permitting a computer system to contain a first plurality of data sets which is formatted differently than a second plurality of data sets (*Ellard: column 3, lines 37-50 and Fig. 1*). The skilled artisan would have been motivated to improve the teachings of Beeler per the above in order to configure a computer system to automatically covert and transfer data from a first data format to a second data format (*Ellard: column 1, lines 29-31*). Configuring a computer system to automatically convert and transfer data from a first data format to a second data format provides the advantage of saving time involved, and reduces the chance of errors arising, in the conversion and transfer of data (*Ellard: column 1, lines 21-30*).

Claim 11:

Claim 11 is rejected under the same reasons set forth in the rejection of claim 5.

(10) Response to Arguments

Appellant Argues:

There is no teaching in Beeler of "modifying an attribute of one of the first plurality of data sets **and setting a checksum associated with one of the first plurality of data sets to a predetermined value**; accessing one of the first plurality of data sets having a checksum set to the predetermined value and formatting at least one attribute associated with the one of the first plurality of data sets to a predetermined format type" as recited in claim 1. (emphasis in original)

There is no setting a checksum to a predetermined value in Beeler. Beeler computes checksums for blocks of data to determine if they are equal and need synchronizing. There is no teaching in Beeler of setting a checksum to a predetermined value when an attribute of a data set is modified as recited in claim 1.

If the checksum in Beeler must be computed, then there is no teaching in Beeler of using a predetermined value for a checksum when a data set is modified.

Examiner Responds:

Examiner is not persuaded. The Examiner asserts that Beeler discloses "modifying an attribute of one of the plurality of data sets" [Beeler: column 12, lines 57-65] "and setting a checksum associated with one of the first plurality of data sets to a predetermined value" [Beeler: column 15, lines 53-56 and Fig. 33, 333].

Appellant Argues that Beeler does not disclose "setting a checksum to a predetermined value." Appellant further elaborates that "[there] is no teaching in Beeler of setting a checksum to a predetermined value when an attribute of a data set is modified." The Examiner respectfully disagrees.

In order to fully grasp why Beeler anticipates the Appellants claim limitations, one must first interpret the Appellant's claim limitation of "setting a checksum...of a data set to a predetermined value" in light of the Appellant's specification. Appellant's specification, paragraph [0019] recites the following:

Each entity identifier identifies one data set in a computer server and further corresponds to a predetermined entity. As discussed above, an entity may comprise, for example, one of the following: a communication network element, data, a software event, or a logical operator. Further, **each entity identifier has an associated checksum value based on a checksum calculation performed on one or more of attributes associated with the entity identifier**. [Appellant's Specification: paragraph [0019], lines 7-9] [emphasis added by Examiner]

First, it is noted for the record that the Appellant's specification does not appear to explicitly recite "setting a checksum to a predetermined value". However, the Appellant's specification does recite a "checksum calculation" that is performed on an "attribute" of an entity. Furthermore, the Appellant's specification: paragraph [0018], lines 7-8 show that attributes are simply data. So, it appears that the when reading the Appellant's claim limitations in light of the specification, "setting a checksum to a predetermined value" can be reasonably interpreted as calculating a checksum using attribute data.

With this interpretation in mind, the portion of Beeler used to anticipate this claim limitation is now reproduced below:

When fast-mirroring is used, Source Replication Manager [241] logically breaks the file [261] in to a number of blocks of a given size [264], and **calculates a checksum for each block** [267]. [Beeler: column 15, lines 53-56] [emphasis added by Examiner]

From the portion of the Beeler patent reproduced above, it is clear that Beeler discloses "calculating a check sum." After further consultation of the Beeler patent, it appears that Beeler teaches wherein the "checksum is calculated using attribute data" [Beeler: column 19, lines 14-15; Note specifically that the checksum values are calculated using the "block size." Surely "block size" is an attribute of a data block.].

Therefore, in light of the Appellant's specification, it appears to be reasonable to conclude that that Beeler's teaching of "calculating a checksum using attribute data" is the equivalent of the Appellant's claimed "setting a checksum to a predetermined value".

Since it appears that each and every element of the Appellant's claimed invention is either disclosed or suggested by the prior art of record, the claims remain rejected under the reasons set forth in the preceding office action.

Appellant Argues:

Further, claim 1 recites, "accessing one of the first plurality of data sets having a checksum set to the predetermined value and formatting at least one attribute associated with the one of the first plurality of data sets to a predetermined format type." In applying Beeler, the Examiner cites to two sections of Beeler that generally recite a "format" for data. There is no mention that "data sets having a checksum set to the predetermined value" are formatted to a predetermined format type, nor is there any relation taught by Beeler between the checksum value and the format of the data. Beeler simply fails to teach this element of claim 1.

The Examiner has essentially found the word "format" in sections of Beeler and relied on this word to allegedly anticipate this element of claim 1.

Examiner Responds:

Examiner is not persuaded. The Examiner asserts that Beeler discloses "accessing one of the first plurality of data sets having a checksum set to the predetermined value and formatting at least one attribute associated with the one of the first plurality of data sets to a predetermined format type" [Beeler: column 5, lines 8-13 and column 11, lines 5-8].

First, it is noted for the record that, in response to Appellant's argument that the references fail to show certain features of Appellant's invention, it is noted that the features upon which Appellant relies [i.e., wherein "data sets having a checksum set to the predetermined value are formatted to a predetermined format type"] are not recited in the rejected claim(s). Although the claims

are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

The above cited features simply do not appear to be recited in the Appellant's claim language. The actual claim limitation recites "formatting at least one attribute associated with the first plurality of data sets to a predetermined format type." Therefore, what appears to be claimed is wherein attributes of, or related to, the first plurality of data having a checksum set to a predetermine value are formatted to a predetermined format. It does not appear to be claimed that the actual first data having a checksum is formatted to a predetermined format, as argued by the Appellant.

With this point in mind, it has already been shown above that Beeler discloses "data sets having a checksum set to a predetermined value." Next, the Examiner would like to highlight column 5, lines 8-13 of the Beeler reference. This portion of Beeler is reproduced below:

Also, if there are not enough network resources to accommodate all of the outstanding packets in the queue, the commands are placed in a **compressed format**. This format includes the file name, offset, and length of data to be changed, but not the actual data to be modified in the file.
[Beeler: column 5, lines 8-13] [emphasis added by Examiner]

First, the above portion of Beeler shows wherein data is formatted to a compressed format. Note that this format must be predetermined. It was note the case that data was first formatted, and then a type of format was chosen. What actually occurs in Beeler is that before formatting took place, it is already determined that the "compressed format" would be used. Therefore, Beeler discloses a "predetermined format type". Second, note that Beeler is specifically dealing with formatting attributes of the data [file name, offset, length of data to be

changed], **not** the data itself. Therefore, it appears that Beeler discloses "formatting at least one attribute associated with the first plurality of data sets to a predetermined format type."

Finally, note that at least Beeler: column, lines 56-61 discloses "accessing one of the first plurality of data sets having a checksum set to the predetermined value". This reference of Beeler clearly shows the requesting and receiving [accessing] of a data set [existing file]. This data set has an associated checksum set to a predetermined value [the process of setting the checksum was explained above]. And the newly retrieved checksum for the version data located on the remote server is compared with the checksum for the version of data located on the local computer. This process is also depicted in Beeler: Figs. 25-27 and appears to be equivalent to the Appellant's claimed "accessing one of the first plurality of data sets having a checksum set to the predetermined value."

Since it appears that each and every element of the Appellant's claimed invention is either disclosed or suggested by the prior art of record, the claims remain rejected under the reasons set in the preceding office action.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the Examiner in the Related Appeals and Interferences section of this Examiner's Answer.

(12) Conclusion

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Art Unit: 2165

Patrick Darno

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Examiner

Art Unit 2163

08-15-2008

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